# Nurſeries, ORCHARDS, Profitable Gardens, AND VINEYARDS ENCOURAGED,

The preſent Obſtructions removed, and probable Expedients for the better Progreſs propoſed; For the general benefit of his Majeſties Dominions, and more particularly of *Cambridge*, and the Champain-Countries, and Northern parts of *England*.

IN

Several Letters out of the Country,

Directed to

*HENRY OLDENBURG*, Eſq;

Secretary to the *Royal Society*.

The firſt Letter from *Anthony Lawrence*;
All the reſt from *John Beale*, D. D.
and Fellow of the *Royal Society*.

*LONDON*,
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To the much Honoured and Worthy

*HENRY OLDENBURG*, Esq;

Secretary to the ROYAL SOCIETY.

*SIR*,

I Ought to take notice (as I think all the Intelligent do) of your Generous Inclination, and free Readineſs to communicate to the *Royal Society*, and thence to the Public, whatſoever is, upon ſure accompt, ſuggeſted for the welfare of any of his Majeſties Dominions. And thoſe Hortulan Affairs are not the leaſt of our Inland Commodities; and they have been the ſerious engagement of the ſaid *Royal Society* from the firſt Year of their Inſtitution; and have proſpered exceedingly in many parts of *England*, and in ſome parts of *Scotland* and *Ireland*.

The great Example of his Majeſty, and of our Nobility, and generally of our chief Gentry, hath prevailed from the Eaſt all over the Weſt, ſo far as to encompaſs *Oxford*. And the ſtop is ſaid to be about *Cambridge*: And here are thoſe Expedients propoſed, which may be effectual to remove all Obſtacles. And, if the Gentry about *Cambridge* ſhall be pleaſed to accept of them, and henceforth to be ſtirring in the buſineſs, as is here directed, they may ſoon overtake all that's done about *Oxford*, and advance more in five years, than hath hitherto been done in twenty, though it is not little that hath been done of late. For theſe Arts, and our Experience, and more Expedients alſo, do grow daily.

One ſaid, that if we had one skilful and diligent Nurſery-man, who had a complete Nurſery of all ſorts of good fruit, and of the beſt Vines that agree beſt with this Climate, and Mulberry Trees, and wholſom Trees for the avenues of Cities, Towns, and fair Manſions; That one ſuch Nurſery within ten or fifteen miles in all the Vales of theſe three united Kingdoms, would make all theſe Plantations ſpread apace, and amount to the value of Millions yearly. I anſwered, That it was now doing: And every reaſonable man eaſily apprehends, how a noble Orchard may be raiſed together with ſuch a complete Nurſery, under the ſame inſpection, and the ſame care; and the one grow on and proſper the better by the aſſociation of the other. And I ſhall here ſhew, How a younger Brother of ordinary capacities, who hath but ſo many Acres of his own as belong to every Cottager by Statute, may thence eaſily and ſpeedily raiſe a conſiderable gain, for the maintenance of his Family, and entertain himſelf with the ſweeteſt and moſt innocent of Earthly pleaſures. And it is great ſatisfaction, and intrinſic comfort to an ingenuous Mind, when he can truly ſay, that all the good Vines, and other beſt fruit in all the Neighbourhood, and for ſome miles about him, are the product of his induſtry; and when he can juſtly claim a poſthume reputation for real ſervices done to his Country.

And here I ſhew, How any Gentleman may freely furniſh all his neighbourhood, even Cottages (who cannot ſend to Mr. *Roſe*) with the beſt Vines: I ſay, *freely*, and at leſs charges yearly, than the uſual price of a Flaggon of good Wine. Yet I know not how it ſhould diſparage our Nobility, to ſuffer their Gardeners to ſell generous Plants, as their Woodmen ſell Timber, and Fuel in their Woods and Coppices, and their Tenants ſell Corn and Cattel in the Market. I am ſure, that many in

*Wiltſhire*

*Wiltſhire*, *Hampſhire*, *Dorſetſhire*, and *Sommerſetſhire* are obliged and the richer for the famous Garden of *Wilton*, and for the goodly Nurſeries about *Salisbury*. And his Majeſties Gardiner, Mr. *Roſe*, was an obliging Example for his ſale of the beſt Vines, and the fitteſt for our Climate.

By this progreſs, and by theſe rules, we cannot fail of good Nurſeries within Ten miles in all our Vales. And this I can propheſie, that where the Tenants have not Orchards, and others have, they will ſhortly fail to pay their Rents. If they cannot be truſted to preſerve and to cheriſh Orchards raiſed at the Landlords charge, they ſhould be compelled to raiſe *Thickets*, as is here taught; that Orchards may the ſooner and the eaſier be there raiſed when a Tenant comes that may be truſted: Otherwiſe the Lands of Gentlemen will fall, whilſt the Lands of ſmall Freeholders are raiſed in value.

There is no need, I ſhould ſay much to invite the Conſumers of their Inheritance, and the Deſertors of their Country, to put their hands to puſh on this affair, ſince the Ingenious Author of the *Gentlemans Recreation* hath ſaid enough to call them out of their B—houſes, and ſcurrilous P—houſes: And the polite Author of the *Planters Manual* ſpeaks good Engliſh to the Effeminate Phantaſticks. For, if none of the Rural recreations, Hunting, Hawking, Fowling, Fiſhing; nor any of the Amenities, profits or pleaſures of Gardens, Vineyards, Orchards; nor ſpicy and fragrant Groves, can reclaim the Prodigal, I have no more to ſay to him, but only, if he underſtands Latine, mind him of the old ſtyle, about 1500 years ago, twice recorded againſt ſuch Romans as became degenerate:

COLU-

*COLUMELLA* in Prefat.

*Omnes enim (sicut* M. Varro *jam temporibus Avorum conqueſtus eſt,) Patres-familiæ, falce & aratro relictis, intra murum correpſimus, & in Circis potiùs ac Theatris, quàm in ſegetibus & Vinetis manus movemus; attonitique miramur geſtus Effœminatorum, quòd à natura ſexum viris denegatum muliebri motu mentiantur, decipiantque oculos ſpectantium. Mox deinde ut apti veniamus ad ganeas, quotidianam cruditatem Laconicis excoquimus, & exucto ſudore ſitim quærimus, noctéſque libidinibus & ebrietatibus, dies ludo vel ſomno conſumimus. Ac noſmet ipſos ducimus fortunatos, quod nec Orientem ſolem videmus, nec Occidentem: Itaque iſtam vitam ſocordem perſequitur valetudo. Nam ſic juvenum corpora fluxa & reſoluta ſunt, ut nihil mors mutatura videatur. At mehercule vera illa Romuli proles aſſiduis venatibus, nec minùs agreſtibus operibus exercitata, firmiſſimis prævaluit corporibus, ac militiam belli, cùm res poſtulavit, facilè ſuſtinuit, durata pacis laboribus; ſemperque Ruſticam vitam præpoſuit Urbanæ.*

Thus much of our old Date, and with twofold Authority, in defence of the *Gentlemans Recreations*, and of our *Agreſtic labour*.

*SIR*,

Your humble Servant

*John Beale.*

# The First LETTER.

*In which some plain Nursery-Books are recommended; with Encouragements and Expedients proper to promote the planting of Nurseries and Orchards in the Champain-Countries near* Cambridge, Leicester, *&c. And the Explication of the* Cumæan Sybills Wheel ⊕ ⊗

*From* Anthony Lawrence.

*SIR,*

1. I Conceive, that it was meerly by Incogitance, that that Industrious Author, Mr. *Austen*, hath not been hitherto mentioned in your *Tracts* amongst others who have handled the same Arguments; Therefore I shall here endeavour to do him right, if it may be with your favour.

His *Treatise of Fruit-trees* was first published *Anno* $16\frac{51}{52}$ 4°.

The *Second Edition* augmented, *Anno* 1657. 4°.

The *Third Edition*, with Notes upon Lord *Bacons* Observations and Experiments on Vegetables, published *Anno* 1665. 8°.

And now lately he published a new Book, under this Title; *A Dialogue between the Husbandman and Fruit-trees in his Nurseries, Orchards and Gardens: In which are discovered many useful and profitable Observations and Experiments in Nature, in the ordering of Fruit-trees; devoutly instructing good Husbands to adorn their own Country,*

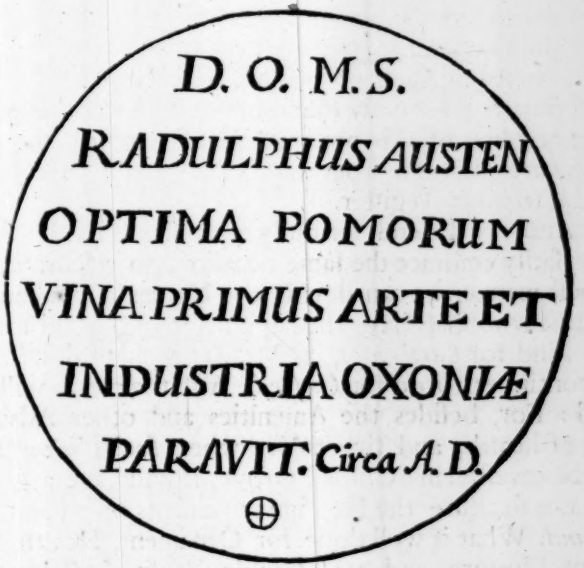
*try, and juſtly blaming Idle and Voluptuous Prodigals, as Enemies to their own Country: By* Ralph Auſten, *Practiſer, at leaſt* 50 *years, in the Art of planting Fruit-trees, in* 8°. 1676. All from *Oxford.*

2. This plain Writer, who pretends to no glory in Rhetoric, hath by his labours and Experiments done more good for *Oxford*, and thence for *England*, than is yet done by many gaudy Gallants, who ſpend more in a day, than this honeſt Nurſery-man can ſpare in a year. For, good Cyder (beſides the pleaſantneſs and wholeſomneſs) may in time ſave us large ſums of our Money, to defend us from Invaſions: Whereas Prodigals do precipitate our Ruine by their waſts upon Forain Vanities and ſuperfluities, as it was repreſented by the worthy Merchant Mr. *Thomas Mun*, to the late Earl of *Southampton*, *Anno* 1664. when he was Lord High Treaſurer, *Chap.* 3. *pag.* 15, 16, 20, &c. And it is to be noted, that this judicious Treatiſe of Mr. *Mun* was licenſed in *Whitehall*, by his Majeſties Principal Secretary; which confirms it to be the true Engliſh Intereſt. And this is the main ground on which that excellent Treatiſe chiefly inſiſts.

3. Upon this authentic and ſure ground, according to our beſt old Rules, by which real merit is to be preferred before undeſerved Titles; and by which he that does moſt good for his Country hath a juſt claim to the higheſt merit: In theſe reſpects we are obliged to attribute more to a Laborious and Skilful Nurſery-man, in his home-ſpun Raiments of Engliſh Manufacture, than to an idle Prodigal with his ſumptuous Equipage of exotic Embroideries. And in regard of Mr. *Auſtens* merit towards *Oxford* and the Public, a worthy Friend hath deviſed a Monument for him: It is in great Roman Letters of Gold upon a Black Marble, the beſt Touch: The Figure round, agreeable to the roundneſs of this

Globe,

Globe, and (as we ſay) of the World: The Diameter three foot, both for modeſty, and that the largeneſs of the Characters may fill up the *Area*: In the moſt ancient and the briefeſt manner, as here you ſee.




4. And it is newly modern, to raiſe Cider that ſhall compare, and excel the Wine of many Provinces nearer the Sun, where they abound with fruitful Vineyards. It is ſo newly Modern, I ſay, to raiſe Cider to ſuch perfection, and it is generally thought incredible, and is hardly believed, where the full proof is not at hand. And it is certain, that Mr. *Auſten* was buſie at his Experiments in preparing Redſtreaks for *Oxford* long before vulgar Cider was to be gotten there for money: So that

Malice it ſelf cannot deny the truth of the Inſcription. And poſſibly the next Age may enroll him among *Benefactors*, as if he had founded or endowed a Colledge. For by experience it is throughly confirmed, That a ſeaſonable and moderate uſe of good Cider is the ſureſt remedy and preſervative againſt the Diſeaſes which do frequently afflict the ſedentary Life of them that are ſeriouſly ſtudious. And M. *Auſten* hath now very lately taken in twenty ſeven Acres of ground, to enlarge his former Nurſeries, and for New Plantations. And this was partly the occaſion of this preſent Addreſs, and of this my Adventure (though from an obſcure hand) to recommend it to your Regiſter.

5. And my Friend ſeriouſly proteſts, That he ſhall moſt gladly embrace the ſame occaſion, to celebrate, in the beſt manner he can deviſe, the Names and memory of thoſe who ſhall have the happineſs to do good in the ſame kind for *Cambridge*, as Mr. *Auſten* hath done and ſtill continues to do for *Oxford*. And the merit will be ſignal: For, beſides the Amenities and other Advantages of health, and ſweet Air, when *both Univerſities* ſhall be inveſted in a Golden Grove, it will have a good influence to allure the like improvements in all parts of *England*. What is well done for Ornament, Health, innocent Pleaſure, and conſiderable Profit (all joyned together) in the Eyes of both Univerſities, will doubtleſs more ſpeedily be every where exemplified, and effectually obtain a progreſs all over the Kingdom.

6. And, if *Cambridge* ſhould be the Example, it would, without doubt, excite very great improvements towards the *North*, and in many Countries about the Heart of *England*. For, if any Expedient can invite the Champain-Countries, that are about *Cambridge*, to Incloſures, I think, Orchards, Gardens, Nurſeries, and Groves, are moſt likely to do it; theſe yielding Quick-

ſets,

ſets and other moſt profitable materials, to enable and encourage for Incloſures, and Gardens every year repaying a full reward, whilſt the ſtandards of ſlower growth do yet ſtill grow on for a more laſting and a more noble ſatisfaction.

7. And for an old Authentical proof, that Vulgar Incloſures, in the old ordinary manner, are more than a Tenfold improvement, give me leave to ſend you an Extract of *T. Tuſſers* old Rhimes, made above an hundred years ago, in the Reign of King *Edward* VI.

*A Compariſon between Champain and Incloſure, by him called Woodland.*

1.

Example by Leiceſterſhire,
What ſoil can be better than that,
For any thing heart can deſire?
And yet doth it want ye ſee what:
Hall, Covert, Cloſe paſture, and Wood,
And other things needful, as good.

2.

More plenty of Mutton and Beef,
Corn, Butter and Cheeſe of the beſt,
More wealth any where (to be brief)
More People, more handſom, and preſt
Where find ye (go ſearch any Coaſt,)
Than there where Incloſure is moſt:

3.

More work for the Labouring man,
As well in the Town as the Field,
Or thereof (deviſe, if ye can)
More profit what Countries do yield:
More ſeldom where ſee ye the Poor
Go begging from door unto door:

4.

In Wood-land the poor men that have
Scarce fully two Acres of land,
More merrily live and do save
Than t'other with twenty in hand.
Yet pay they as much for the Two
As t'other for Twenty must do.
If this same be true, as it is,
Why gather they nothing by this?

Sir, this is the old form; and *Tussers* rules are esteemed the best that are extant at this day, for the generality of Husbandry and Huswifry, to them that can bear his Canting Rhimes. All later Writers, and long experience do confirm this his Sentiment; and all his Instances do hold too true to this day. By *Inclosures* and *Culture* the worst Land in *England* yields Tenfold more profit (besides many other advantages hinted here and in other parts of his Comparison) than that which is here called the best and richest Land; as will yet appear, if we compare these, which were lately the furzy parts of *Devonshire*, with the Champain of *Leicestershire* and *Cambridgeshire*. And what he saith here, is all to very great purpose; for offices of Charity, Imployment for the Poor; and for multitudes of Labourers; for Populousness, the strength, riches, and glory of the Kingdom. And if he may challenge a Tenfold improvement for the ordinary Inclosures of those times; we may with modesty promise a Twenty-fold, for our extraordinary and modern skill in Hortulan affairs. And in his last clause *Tusser* shews, That the Lords of Mannors are as much concerned for the advance of their Revenues by Inclosures, as the Vulgar for their ease, plenty, and some kind of prosperity.

*Again,*

Again, what a Joy is it known,
When men may be bold with their own:
Saith *Tusser* in a latter Edition.

8. Now I proceed to represent, with what facility this great and good work may be brought on by *Nurseries*, and young *Thickets* of Quicksets. Every Lord of a Manor, and most of the substantial Free-holders, can find a few Acres safely inclosed for such purpose, in his own possession; and a few Acres, rightly ordered for those Uses may furnish a Province for Quicksets, and all sorts of better Standards for Orchards. How it may be done at small charges, and with dispatch, our *Tusser* will tell us:

So, plow up, or delve up, advised with skill,
The breadth of a ridge, and in length as ye will;
Whose speedy Quickset for a fence ye will draw,
To sow in the seed of the Bramble and Haw.
October *v.* 8.

This is the brief of the old plain way: And this is in the worst case, namely, to beget a Fence or Inclosure where there is none: And any Bramble or other wild bushes are better than no fence. But where the Inclosure is already provided, his advice is more magnificent or lofty:

Sow Acorns, ye Owners that Timber do love,
Sow Haw and Rye with them, the better to prove.
October *v.* 6.

And, if the ground be reasonably in heart, and of a sufficient depth, a strong Plow by cross plowing, and

weighty

weighty Harrows may make the ground mellow, and fine enough for the Seeds of all hedges, bushes, and trees of the Neighbourhood; for Seeds of Ashes, Maples, Elms, Sycamores, and the like; and for Kernels of Crabs, Apples, and Pears, and for Stones of all stone-fruit. There also they may prick-in, or set with the Hoe, Walnuts, Chesnuts, Beech, Nuts, Filberts; and for no great charge, the Seeds of Pines, Firrs, and whatever else the Owners delight in, as is copiously digested in Mr. *Evelyns* SYLVA. For such Seeds as require finer work, here and there the Garden-Rake may do it. And for such as do not kindly bear Transplantation, and for such as are to remain there for standards, the Seeds may be set, three or four in a place, at fit distance, and in rows of the *Quincunx Order*, or in perfect Squares.

9. I have heard some good Husbandmen say, They can well remember, when this slight way was the only way that was in use to raise these Orchards which are now esteemed the best, and the most fruitful in *England*. And it is yet pleaded, by some of good experience, that the *Wildings*, taken out of such Thickets, do commonly thrive better upon removals into Nurseries or Orchards, than those Plants that have been tended more curiously and nicely. And in reason we may probably expect, That Seedlings or Stocks, drawn out of Thickets thus rudely ordered, should be kinder than those which are taken from Roots, or from Under-trees, or from Hedge-rows, or out of the wildest Coppices, whether the Seeds were brought by Birds, or other casualties, where they were left to shift for their own propagation, without other culture. And yet by common experience we find, that these Shifters do thrive well enough for Transplantations into Nurseries or Orchards. If the root and the lower part of the stem be sound, the graft which is placed there seldom complains of the injuries done

done to the top, before the grafting, by droppings of Trees, or by bruttings of Cattle, or by oppreſſion or incroachments of neighbouring Plants. I have oftentimes ſeen theſe, when at full freedom, advance their grafts more ſpeedily, than thoſe that have been moſt tended by curious culture.

10. Some nice *Wall-fruit*, and ſuch as are to be planted in Gardens, may deſerve a more curious diligence at firſt: And in this our thicket, if the ſoyl and ſhelter will allow it, the Rake may prepare fit places for theſe, or for any kind of curioſities. For which there may be found accurate directions in the *French Gardiner*, and in the *Sieur le Gendre* his manner of Ordering Fruit-trees by an experience of almoſt fifty years, as he ſaith in his Inſpiring Preface.

11. Now we come to the main point. Some of theſe Quickſets will be ready and fit to be drawn for the Neighbourhood every year. And, if they be taken up with diſcretion, thoſe which remain, eſpecially ſuch as are fit to be left for ſtandards, will thrive much the better for the frequent, gentle, and wary ſtirring or turning of the earth about their roots. And at this cheap rate, (and indeed for the better advance of our own Quickſets,) here is work enough, and ſtuff enough, to engage all the Ring-leaders of the tumultuous Rabble, to call in all their Parties, and to ſtickle as ſtoutly for Incloſures as ever they did formerly to hinder them. Meanwhile, Gentlemen and Freeholders may thus accommodate themſelves, and ſet eaſie bargains to all their own Relations, and adherents, younger Brothers, Servants, and Tenants; which, in the end, will prove a great increaſe of their own Patrimonies and Revenues, and a bleſſing to all the Neighbourhood. And thus, many *Commons*, which have been hitherto little better than waſte-grounds, may in a ſhort time become

populous

populous Villages, and well provided of all neceſſaries.

12. And becauſe our experience grows yearly, by new diſcoveries of excellent Cider-fruit, for all Seaſons, and for all diverſities of palates; for the firſt Summer, and for durance, two, three, four, or more years; ſome by their peculiar kind, and ſome by right ſorting them in mixtures, in the grinding time (by both which ways we in the Weſt have already found many ſorts of Cider, that do manifeſtly far excell all the ordinary ſorts of French Wine, *nemine contradicente*;) Therefore ſome worthy Gentlemen are endeavouring to eſtabliſh a correſpondence of Free Contributers, Gardeners and Nurſery-men from all the Weſt and South, towards *Oxford*, thence towards *Cambridge*, and ſo all over *England*. This to be at leaſt once, but better twice in the year, *viz.* in Autumn (when the fruit and the ordering of the fruit and Cider may be ſeen, and when the Kernels and Seeds of all fruits may be had;) and eſpecially in the early Spring, when all ſorts of Grafts may be had; many thouſands of Graffs eaſie to be carried in a Portmantle, if they know, how the Cions may be uſed for a Graff (which point few Gardeners or Graffers themſelves did know, till I taught them.)

13. And thus a Gentleman, or an ingenious Gardener may learn more in a few days travelling, than can be written in large Volumes, or than would ever come in his mind to enquire at home. At preſent I offer two ſpecial and extraordinary Remarks for Nurſery-men:

The *firſt* is from Dr. *Munting* in the Philoſophical Tranſactions, *N.* III. p. 248. "To graff upon ſuch Apple-"ſtocks as are raiſed from the ſame kind of Seeds, and "have been deprived of the *heart-root*, which is the "ſame that deſcends *directly*. Thus, he ſaith, we may "obtain

" obtain extraordinary good, big, and beautiful Apple-
" fruit. I conceive it probable, and that in time by
" changes of the like kind in Pears, and many other
" fruits, a closer friendship between the Stock and the
" Graff may be eſtabliſhed. And this is an *Item* for our
" Travelling Nurſery-man to furniſh his Portmantle
" with the Seeds of ſpecial fruit apart, or in the marc,
" where they can be had fulleſt, thickeſt, and leaſt
" bruiſed. Theſe they may ſow in beds apart; as, for
" example, the kernels of Red-ſtrakes in beds deſigned
" for the Graffs of Red-ſtrakes: So of Pears, and other
" fruit. Some kinds of Plants will not well endure, that
" the *heart-root* be cut off. In ſuch caſes ſome put a Tile-
" ſtone under the heart-root, and bow the root aſide,
" that it may run on, and grow in better manner than is
" at diſtance under the ſurface.

" My *ſecond* remark I can better aſſure, namely, To
" chooſe for ſome beds the ſeeds of the largeſt Trees,
" which conſtantly bear the greateſt burthen of good
" and profitable fruit; as I can name, where an Apple-
" tree, where many Pear-trees (ſome for delicate fruit,
" and ſome for their liquor,) and where Crab-trees are
" of ſuch huge bulk, and of ſuch ſpreading growth, that
" conſtantly each of them do yearly bear three, four, or
" five hogſheads of liquor. The ſeed of theſe for ſtocks
" to graff of the ſame, would doubtleſs be ſtately Trees
" for a noble Orchard, at fifty foot diſtance at leaſt. But
" more of this hereafter. One skilful and diligent Gar-
" diner, or Nurſery-man, within ten or fifteen miles di-
" ſtance, in all the Vales of *England*, would drive on
" theſe Plantations apace all over *England*, to the great
" gain of the Gardener. And the like we may hope of
" *Scotland* and *Ireland*.

14. To have good Red-ſtrake, or any other excellent Cider, or the beſt Perry, the fruit muſt be perfectly

ripe and odorous, and ſuch only ſhaken off the Trees at firſt; the reſt to abide there till perfectly ripe: And it is the better, if they lie in heaps a week or fortnight. If ſome be rotten, the liquor is not the worſe (as Mr. *Newburgh* rightly obſerves,) it is the better; if the rottenneſs be not fetid, muſty, hoary, or black rottenneſs: Such muſt be carefully caſt away. And ſome ſay for the beſt Cherry-wine, the Cherries muſt hang on the Trees two days fully ripe, and abide two or three days after gathering before they be preſſed; though they ſeem bruiſed, and almoſt rotten. In *France* I have ſeen Grapes lie a good while in a huge Vat, preſſed and bruiſed with their own weight, before they began to tread them: And no Grapes are at the beſt, or ſafely wholſom to be eaten, till three or four days after gathering. I have oft-times tried, and uſed whole hogſheads of Red-ſtrakes and Gennet-moyle, mixed by equal portions, in grinding time, and either apart was generally preferred before the mixture.

I never had better Cider, than when (after the care above-ſaid for ripeneſs and lying in heaps) I cauſed it to be grinded and preſſed with diſpatch, and ſpeedily put into the Hogſheads, and the Hogſheads immediately cloſed up perfectly, ſufficient room being left for the liquor to ferment. All the following Summer it continued brisk, ſprightful, ſtrong; and ſmoother or leſs windy than when bottled. It is certain, that the groſs matter (which ſome body calls the *cruſt*) preſerves the liquor in ſpirit, as kindly as if bottled: This I obſerved, when the liquor was put into the Veſſels very negligently, and foul of the Mare. And they ſay, ſome Ladies do ſpoyl their Meaths and Metheglins by ſcumming them ſo nicely as to hinder ſeaſonable fermentation. The liquor which comes firſt and eaſieſt from the Preſs is beſt. It is an endleſs trouble, to pare and pick apples; which

which would be laughed at in the Cider-Countries: But I ſhould well accept of a Cider-mill, which would ſever the rind, kernels, and ſtems; as I read in *Vinetum Britannicum*, and in your *Philoſophical Tranſactions*, *Numb.* 124. *p.* 584.

15. Laſtly, the *Cumean Sibyls Wheel* ⊕ ⊗ (uſed above in Mr. *Auſtens* monument) is in the latter Impreſſions of *Angliæ Notitia*. I find it firſt in the *Sixth Edition*, *Chap.* 2. *p.* 68. Here I will do it a little more largely; The moſt ancient Characters of Numbers among the *Romans*, which they ſay were uſed in the old *Tuſcan* Rites, were all drawn from the Croſs in a Circle, reſembling the *Church* in the *World*, ⊕. The Circle or World is always Rolling, as Time is; ſo it wheels thus ⊗, to produce St. *Andrews* Croſs, and V the *Semidecuſſis*.

⊕. ↀIↃ. IↃ. C. L. X. V. I.

1000. 500. 100. 50. 10. 5. 1.

| | |
|---|---|
| 1000 | |
| 500 | |
| 100 | Thus ⊕ compleats all the figures, juſt 1666. |
| 50 | |
| 10 | |
| 5 | |
| 1 | |
| 1666 | |

As X before C, ſubducts X from C, and makes XC ſtand for 90; ſo X before ⊕ ſubducts X from ⊕, and maketh X ⊕ ſtand for 1656; XX ⊕, 1646; XXX ⊕, 1636; XL ⊕, 1626; ſo by adding X after ⊕, thus, ⊕ X, it ſignifies 1676.

And thus it relates to a twofold *Æra*. Both numbers joyned together relate to the Birth of Chriſt: The added number relates to the Conflagration of *London*, *Anno* 1666. Which they that are concerned for *London*, may take notice of in their Monuments, or other Records of Time. I pray God to raiſe *London*, and to preſerve it, to be the great Empory of the world; and that in the proſperity of *London* all his Majeſties Kingdoms and Dominions may ever proſper. And it is hoped,

that the ſpeedy and ſplendid Reſtauration had a good *Omen* for the perpetual growth of that famous City. And it is believed and expected, that before ⊕ XX } XX / 1686 } 20 years after the Conflagration be compleated, good Ale, good Beer *d' Angleterre*, good Cider, and Brandies drawn from Engliſh Wines, which are all of Engliſh growth, and Engliſh Manufactures, ſhall raiſe a greater profit, both at home and by exportation, than hath ſometimes been gained by our Staple-trade; and greater Revenues to the Crown by Exciſe and Cuſtoms, than ſome of our victorious *Plantagenets* obtained by our Staple-trade: And that *London* (by aſſiſting the Fiſhery of *England*, *Wales*, *Scotland*, *Ireland*, *Newfound-land*, *New-England*, *Bermudas*, and his Majeſties other Iſlands) ſhall raiſe our Naval affairs, and all our ſeafaring concernments, and our Forein Trade, far above any former Examples. And this (in the ſentiment of a Country-Clown) is the ſureſt expedient to hold all theſe Kingdoms and Dominions together, and united under one Monarchy; without which *London* cannot be *London*. And this is *Englands* true Intereſt.

## *POSTSCRIPT.*

TO ſmooth what hath been here rudely adviſed, if any are willing to have more indulgence for Nurſeries, they may be more punctually directed by Mr. *Auſten*, Dr. *Sharroc*, Mr. *Drope*, the *French Gardener*, and *Le Gendre*, whoſe *Preface* I called Inſpiring, becauſe it is able to inſpire a *Prince* or an *Emperour*, a *Cyrus* or a *Dioclefian*, to fall to the Hortulan work with his own hands.

*Claudite jam rivos pueri, ſat prata biberunt.*

The

# The Second LETTER.

## *Concerning* ORCHARDS *&* VINEYARDS, *By* John Beale, *D. D. and Fellow of the* Royal Society.

I Am glad they have *Cherry-Orchards* in the Neighbourhood of *Cambridge*. Theſe, if ordered for their beſt advantage, will be no obſtruction, but a proper expedient to bring on Plantations of Nurſeries, and of Orchards for the beſt Cider, and for other good fruit. And a very fine and brisk Wine may be made of ſome ſorts of Cherries: But few have yet hit the right Art of making the beſt Cherry-Wine. Sir *Kenelm Digby* ſhews us his way of making Cherry-Wine, in his *Cloſet*; a Book, which will ſhortly be in great eſteem for manifold uſes, but eſpecially when our good hoſpitable Ladies have throughly learnt the due manner of uſing Sugar and ſeaſonable Fermentations for as many or more kinds of Artificial Wines, as heretofore, and at preſent, they uſe Honey to make Meaths, Metheglins, Braggets, Hydromels, Medeas, and ſuch like Compoſitions: Of which ſorts I think he reckons above 90 ſeveral ways, practiſed by honourable Perſons in *England*; and where theſe Honey-drinks are made beſt, and are in greateſt eſteem in other parts of *Europe*.

2. When the uſe of Sugar ſhall be brought into common practice, and as well known as the uſe of Honey is and hath been many Ages; then we ſhall know the true worth of Dr. *Jonathan Goddards* propoſal for making Wine

Wine of the Sugar-cane, mentioned in the *Hiſtory of the Royal Society*, p. 193. For, when we have done our beſt for Cider, it is only the Sugar-cane that can challenge all the Vines in the world. And if theſe be ſometimes offenſive by too much luſciouſneſs, they may be helped by wholſom mixtures of a pleaſing auſtereneſs, or gentle poignancy, more acceptable to the ſtomach. This may be had from ſome ſorts of *Plums*, and other Vinous Berries; of which *Vinetum Britannicum* gives the fulleſt accompt of any that is yet extant. This *Vinetum* and Sir *Kenelm Digby*'s *Cloſet* are at preſent ſeaſonable furniture for a Ladies Cloſet, to inſtruct in that practical devotion and charity, which obligeth our Country, and keeps the Poor from idleneſs and famine.

3. And ſuch mixtures of the Wine of the Grape as theſe, which I here propoſe for mixtures with Sugar, and much more than I can propoſe (without Tranſcripts) are ſo ancient, both in old *Greece* and in old *Italy*, that I think no Antiquary can name their Origin. For two thouſand years we are ſure, and can ſhew abundance of particular Receipts, the Ingredients, and the Doſe, punctually in *Cato*, *Columella*, *Conſtantine* the Emperour, and *Palladius*, who derives one of his Compoſitions from the Oracle of *Apollo*, (*Quod Cretenſibus Oraculum Pithii Apollinis monſtraſſe memoratur*, ſaith he, *Octob. Tit.* 14.) And we know, that *Crete* or *Candy* hath been long famous for excellent Wines. I cannot ſay, how far the ancient Conditures of Wine, and their mixtures and boylings of Wine, do agree with our modern ſophiſtications, and jumblings, and recoveries; but for wholſomneſs I dare lay a good wager on the ſide of the Ancients; my ſelf to drink it in the old way; our Merchants and Vintners to drink it in their own new dreſs. And for varieties, I dare from the Ancients challenge the skilfulleſt of our New men. *Peter de Creſcentiis*

is none of the Ancients; but I may take him on my ſide againſt our laſt Innovators, dwelling at the ſign of the Buſh. And this boldneſs I take (though with ſome compaſs) to hedge in a defence of the deſign of *Vinetum Britannicum*, and of our honourable Ladies artificial Wines, made by the mixture of Sugar, with all the ſanative and reſtorative Simples, Vegetables, Spices, and Drugs, which Nature hath hitherto brought forth.

4. But yet I have much to ſay for the Wine of the Grape, though with ſome diſparagement to our own Country-men, who have done ſo little for it, after they have had ſuch bright Inſtructions, and ſuch lively encouragements from Mr. *Evelyn* and Mr. *Roſe* in their Engliſh Vineyards, publiſhed *Anno* 1666. Mr. *Roſe* then offering all that deſire it with Sets and Plants of the beſt Vines (ſufficiently tried in our own Soyl and Climate) at reaſonable rates: And Mr. *Hughes* enlarging (in his *Compleat Vineyard*,) as the manner is in *Germany*. And now newly the twice-named *Vinetum* adds more ſpurs, and his particular directions. Our Manſions, and our Outhouſes, and almoſt every Wall, and Bank, and Cottage, hath one ſide aſpecting the South; and both *England*, and *Wales*, have Mountains and Hills, Precipices and Rocks, as good as Walls to ripen Grapes, for the Table, for Wine, and for Brandy, and (when that fails) for ſauce and for Vinegar. And the labour and art is leſs than every Country-boy learns in a Hop-yard; and one skilful vine-dreſſer may teach hundreds, and whole Provinces; as of late years one skilful Hop-man taught a whole Country. And multitudes raiſe clamours, that Trade decays, and make loud out-cries, that they want work and honeſt employment; and we ſee, and too well know, that *England* ſwarms with idle Vagrants, Beggars, and Indigents; a great burthen and a great ſhame to the

the Kingdom. Now here is one ſpecial remedy; and gentile employment for generous Families: And this Paper may yet offer much more of ſure and ſpeedy remedies.

5. I muſt add a word for Vines, to ſhew, How eaſily and ſpeedily they may be propagated all over *England* at very ſmall charges. Before Mr. *Roſe* obliged us, I found in ſeveral parts of *England* the *Black Cluſter-Grape*, which Mr. *Roſe* commends in the firſt place, and alſo a very excellent White or light Watchet Grape; both which were ſo eaſily ripe, and conſtantly in ſuch abundance, far more Northerly than *Cambridge* lies, that I am perſwaded, they will proſper well in ſome parts of *Scotland*, where they have a longer Summer-day than we have; and in thoſe parts of *Ireland*, where they have the ſame Sun that we have, and the Air leſs pluvious ſince they have drained many of their great Loughs or Boggs. They are beſt planted from Layers well rooted: But in a bed of ten foot ſquare I tried Cutlings, which had at the foot ſomewhat of the old wood, and there did none of them fail of ſufficient root the firſt year, being ſet at a foot diſtance in the bed: Yea, the ſmall ſprayes proſpered, having ſomewhat of the old wood, (as I may call it,) cut from the branches, on both ſides of the foot of the ſmall ſprayes. And thus we may have a hundred rooted Plants from the prunings of one Vine. I offered them to Cottagers; but they generally anſwered me churliſhly, that they would not be troubled with Grapes: But being told, how little the trouble would be, and that within five years they might have a buſhel of Grapes at a time, which might be ſold for good money in the next Market, a few bunches for a peny, they were ſoon of a more thankful mind. And if Grapes were ſent to Market, as other Fruit is, they would ſoon mind the Plebeians to be as wiſe and happy,

happy, as other their Neighbours are. And thus Plants would be ready at hand, for any to try a trench under ſome Sunny banks. And doubtleſs ſome of the hotteſt places neer the foot of the Hills and Mountains in *Wales*, would bear as good Wines, as they did in the days of *Gildas*.

6. This is the Conduct which will be more effectual to ſpread *Vineyards* all over *England*, when the meaneſt of the People, even Cottagers, ſhall be concerned to learn ſomewhat of the dreſſing of Vines. And this will do ſomething towards making good my prefacing Addreſs for the advance within five years: *Cherries* and *Plums* will not be long behind. And the beſt *Pears*, when graffed on the Pear-Quince, with ſome help of Walls or Banks, will come on apace. And when in the Country we have learnt to dry all ſorts of fruit, the firſt fruit of Pears will bear a good value. I know ſeveral ſorts of Pears in *England* now, which, being dried, approach the dried *Warden* in colour and taſte; and are preferred by moſt men before Marmalades of Quinces, which are too luſcious for mens palats. But *Quinces* alſo make ſome grateful return within five years.

7. The Vinous ſhrubs out-run all the former, and are at full within two or three years. And hence I ſay again, that, when our Country-Ladies have taught one another the beſt way of drawing buſh-wines or ſhrub-wines by the help of Sugar; it will be a ſudden improvement of *England*, *Wales*, and *Ireland*, and a great kindneſs alſo to *Jamaica*.

8. But that which brings the preſent Hortulan pay the firſt years, to fill the Gardeners long Pouch,

as *Tusser* calls it, is the due execution of all points, according to the *French Gardener*; first in the approaches of both Universities, and other chief Cities and Towns, and under one where-ever New Orchards (and especially Noble Orchards) are designed. This is all the skill I have in Rhetoric, and Eloquence, to repeat and inculcate my proofs; Δὶς ἐ τρὶς τὸ καλὸν.

9. But I must not forsake the *Vine*, upon such easie terms, we should get all sorts of Vines, as it is easie for the *Londoners* to do, though they were ten thousand sorts; but first from our *next* Neighbours, from all the Coast of *France*, and the nearest on the *Rhine*: Perhaps these may do best for our ordinary works or first Essays. From *Paris*, *Orleans*, *Graves*, *Poitiers* (where I always met with excellent stomach-wine.) From the *Mosel*, the *Main*, the *Necker*, and the *Danube* in *Germany*. From *Italy*, the *Aminean*, and the *Falernian*, the best in *Augustus* his Age, and so esteemed four or five hundred years after (in my own reading;) I mean so esteemed in *Italy*.

*Sunt Thasiæ vites, sunt & Mareotides albæ;*
*Pinguibus hæ terris habiles, levioribus illæ:*
*Et passo Psythia utilior, tenuisque lageos,*
*Tentatura pedes olim, vincturaque linguam;*
*Purpureæ, preciæque: & quo te carmine dicam,*
*Rhætica? Nec cellis ideo contende Falernis.*
*Sunt & Ammineæ vites, firmissima vina.*

Virg. Georg. l. 2. ver. 91.

10. This for the Vines of *Italy*. But then the Wines of *Greece* and of some Islands did challenge the

the Wines of *Italy*; and the like from other remote places; from the next adjacent Isles, from *Messina* in *Sicily*; from *Candy* and *Corsica*. *Columella* sweats and frets at it: *Et vindemias condimus ex insulis Cycladibus, & ex regionibus, Baticis Gallicisque—— Itaque in hoc Latio & Saturnia terra, ubi Dii cultus agrorum progeniem suam docuerant, ibi nunc ad hastam locamus, ut nobis ex transmarinis provinciis advehatur frumentum, ne fame laboremus.*

11. And *Virgil* confesseth the fact, and sends us far off for excellent Wine:

*Tmolus & assurgit quibus, & rex ipse Phanæus:*
*Argitisque minor, cui non certaverit ulla,*
*Aut tantum fluere, aut totidem durare per annos.*
*Non ego te, mensis & diis accepta secundis,*
*Transierim, Rhodia, & tumidis Bumaste racemis.*

12. Doubtless from *Smyrna* our Merchants may be furnished with many kinds of most noble Vines. And I am confirmed in this expectation of excellent Vines from *Greece*, and particularly from *Smyrna* (from whence we have, to this day, excellent Wines;) because *Constantine* the Emperour, who made diligent search for all the best Vines that could be heard of, prefers and highly extols above all other Vines the *Myrsitis*, (so he calls it) which makes the famous *Dendrogalonum* of *Bithynia*, and the *Tianum* of *Paphlagonia*, and the best Wine in *Heraclea Ponti*; and where-ever it is planted, excels all other Vines, for the generosity of the Wine, for the Nectarine delicacy (saith he) of the Grape to eat, and for the incredible fertility, *Lib.* 5. *c.* 2. In the same Chapter he extols the Theriacal or *Treacle* Vine (θηριακὴ) for

for the moſt pleaſant, wholſomeſt, and beſt Wine without controverſie: for this, he recites the Teſtimony of *Democritus*. This Emperour reſided, for the moſt part, in *Conſtantinople*; yet could not be a ſtranger to the beſt Vines in *Italy*. And *Lib.* 5. *c.* 17. he mentions the *Aminean* and *Surrentine*, and other Italian Vines, preſcribing what ſoyl is fitteſt for what Vine. There he praiſes the *Aminean* for a general capacity of abounding fertility in every kind of ſoyl, on the Hills, in the Vales, and in mooriſh, moiſt, or ſqualid places. But for rich Wine, he prefers the *Droſyllan*, and the *Leucothracian* of *Bithynia*; and for early maturity, the *Boline* of *Bithynia*. Of twenty Books of Georgical Precepts or Collections, this Emperour employs five (namely, IV, V, VI, VII, VIII,) to remark the choiceſt Vines, the fitteſt Soyl, the beſt Culture, the ordering the Vintage, and the improvement of Wines by Art, Mixtures, or Compoſitions.

13. Neither ſhould we neglect the Vines of *Spain*, about St. *Martin*, and *Ribotany*, and *Gibraltar*; of the *Sherry*, *Malago*, and the *Canaries*: which laſt Vines are ſaid to prove no other with us, than the Vines of the *Rhine*. But withall it is noted, that of late ſome Vines are found in the *Canaries*, which do much excel all that were formerly there known. And the *Madera* Wines are of a ſtout Maſculine ſtrength, which bears the heat of the Tropics, and holds out in *Barbados* and *Jamaica*, where the beſt Canary is too fulſom and luſcious.

14. And ſince Trade and Navigation hath enlarged our Correſpondence ſo far, we ſhould ſend to the other ſide of the World for ſome variety of the beſt Grapes in *America*. The *Canada*-grape is in ſome eſteem

eſteem here. But what is that alone to the infinite variety of better Vines, even in *New England*, which cultivate themſelves without mans aid; of better yet in *Virginia* and *Carolina*. I muſt alſo name *Barbados*, *Jamaica*, &c.

15. Here is much for Nurſeries and Nurſery-men. But where are the *Seeds*, and *Seeds-men?* This, indeed, if rightly ordered, would ſecure us of performing more Vegetable Miracles, than the Sun, or the Son of Man ever yet ſaw, and at leſs charges, and perhaps for greater profit, than by ſome of our Nurſeries have hitherto obtained, and (to hold to my former Terms) within five years. True, we have long ſince had the ſtately *Flower of the Sun*, the *Marvel of the World*, the *Crown Imperial*, and many bulbous beauties, *Fritillaries*, *Anemones*, and *Crocuſſes*. But what trifles are theſe, in compariſon of thoſe Trees, Fruits, Vines, and Herbs, I muſt ſay, noble, enlivening, reſtorative and invigorating Pot-herbs, which may be even in our *American* Plantations, and eaſily obtained for us, or, at leaſt, their Seeds, for trial. Beſides what Mr. *Joſſeline* hath written, I have ſeen ſuch a wonderful Catalogue of all theſe kinds, from *New England* alone, by a very intelligent perſon, that it forced me to cry out, *O, how lazy have we been for a whole Age!* One ſaid, It was but a ſtep or two, and a gentle ſwing from *Whitehall-ſtairs* to *Barbadoes*, or to *Jamaica*. *Barbados* the faireſt Garden that ever was yet in the world; not excepting the Sky-reaching Towers of *Semiramis*, nor the Gardens of any of the Ancient or Modern Monarchs of the Eaſt, of *Mogols*, *Sophies*, or *Chineſes*; nor of the *Pharaohs* or *Ptolomies* of *Ægypt*, nor of *Solomon* in all his glory in the *Holy Land*. Thoſe had more of the

works

works and designs of men and women; these have more of the workmanship of God. Their walls and defences, the Coral-rocks (as Mr. *Hughs* calls and describes them) of *Jamaica* and the Seas, are meerly the work of God alone. And in a short time, *Jamaica* may be more than ten times fairer (as it is more than so much larger) than *Barbados*. One ingenious Nursery-man in each of the English Colonies, corresponding with ingenious Seedmen in *Lombard-street*, and in *Bristol*, and in all our chief Port-Towns, (to try all the Seeds we could send them, and to return back to their native soyl the Seeds of all our Vegetables which prospered in any of their soyls, and we doing the like to them,) by many returns upon trials, again and again, here and there, would make the work short, and wonderful, and (doubtless) exceeding profitable, and shew us more than any of our *Botanic* Writers ever dreamt of. And in this, *Ireland* hath the advantage. It is but a swing of three Weeks patience from their long reach to any of those Gardens: And the soyl of *Ireland* is as pregnant as ours, and their Climates as favourable.

FINIS.